



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,479	10/01/2003	Kenneth C. Shuey	ABME-0806/B970162	7529
23377	7590	07/28/2006	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			BORISSOV, IGOR N	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,479

Applicant(s)

SHUEY ET AL.

Examiner

Igor Borissov

Art Unit

3639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-418)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-153)
- 6) ☐ Other: _____

IGOR N. BORISSOV
PRIMARY EXAMINER

DETAILED ACTION

Response to Amendment

Preliminary Amendments received on 10/14/2003 and 11/03/2003 are acknowledged and entered. Claims 1-16 have been canceled. New claims 18-22 have been added. Claims 17-22 are currently pending in the application.

Double Patenting

Claims 17-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,684,245, because the patented automated meter reading system is an obvious variation to the present application claims including an automated meter reading system. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application contains obvious variant recitations which are obvious variations of the patented invention features since both comparisons perform the same function, in the same way with the same result.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of independent claim 17 is directed to an apparatus (system), while the body of the claim recites a data structure, which is confusing.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The independent claim 17 appears to recite two statutory classes of invention: an apparatus (system) and a computer readable medium having a data structure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 5,963,146) in view of Suzuki et al. (US 5,892,912).

Johnson et al. (Johnson) teaches an automated meter reading system comprising a plurality of utility meters for measuring and recording metered data; a plurality of nodes (cell nodes), each node communicating with a number of designated meters to read the meter data; a plurality of gateways (intermediate data terminal), each gateway communicating with a number of the nodes to receive the meter data; a data network (WAN) interfaced to communicate with the plurality of gateways, and a host server (Central Data Terminal) interfaced with the data network to receive the meter data read from the gateways, wherein said meters are grouped in a plurality of cells, each cell having a node; and wherein a plurality of nodes are grouped to be assigned to a plurality of gateways; and wherein said host server maintaining a topology database, wherein said topology database comprising:

first electronic data representative of meter assignments to at least one node;
second electronic data electronically keyed to said first electronic data and representative of node assignments to at least one gateway;

third electronic data electronically keyed to the second electronic data for grouping together a plurality of nodes to define groups of noninterfering nodes based at least in part on the node assignments; and

forth electronic data electronically keyed to the second electronic data for grouping together a plurality of gateways to define sets of noninterfering gateways (Figs. 1, 6, 12, 13; C. 3, L. 45-65; C. 5, L. 12-29).

Johnson does not specifically teach the specifics of data structure defining association of groups of nodes.

Suzuki et al. (Suzuki) teaches an automated system for managing a plurality of nodes on a network, comprising a plurality of network nodes (meters) communicating with a designated switching hub (node), a plurality of switching hubs communicating with servers over the WAN, wherein said servers provide resources to the individual switching hubs. In use, the VLAN server stores MAC addresses of the nodes connected to the ports of the individual switching hubs, and VLAN identifiers specifying groups to which the respective nodes etc. belong. The file server stores document or data files. Each of the servers also is a node having a communication function, like the other nodes, and has a MAC address associated therewith and a VLAN identifier specifying a groups to which it belongs (C. 2, L. 47-65; C. 4, L. 55-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Johnson to include the specifics of data structure defining association of groups of nodes, as disclosed in Suzuki, because it would advantageously allow to facilitate the management process of the network, thereby enhancing the efficiency of the system performance.

Claims 18-21, see reasoning applied to claim 17.

Furthermore, as per claim 18, the claim includes the following language:

"...wherein said host server stores information related to the topology of gateways, nodes, meters, and their respective interconnections and/or interfaces", which appears to recite an intended use of the system, and does not recite structural elements. Therefore, said language is given no patentable weight.

MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*"

Claims Directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 528-531 (CCPA 1959).

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (bd Pat. App. & Inter. 1987).

Same reasoning are applied to the remaining claims.

Examiner's Note

Examiner has cited particular columns and line numbers or figures in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

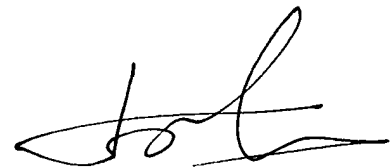
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Art Unit: 3639

supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IB
7/24/2006

A handwritten signature in black ink, appearing to read 'Igor N. Borissov', with a stylized, flowing script.

IGOR N. BORISSOV
PRIMARY EXAMINER